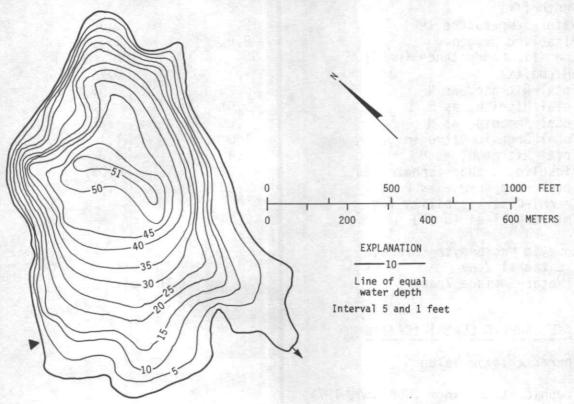
SILVER LAKE	SNOHOMISH COUNTY	WRIA	08
STEVEN FOILE	SILONOPIE SIL GOOM I	7417477	~~

T28N-R05E-30 LATITUDE 470 53' 18" LONGITUDE 1220 12' 31"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	1.09		Residential Development	85	pc t
Altitude	426	· •		7.0	
Lake Area		acres	Number of Nearshore Homes	76	
Lake Volume		acre-ft			
Mean Depth		ft	Land Use in Drainage Basin		
Maximum Depth		ft		_	
Shoreline Length	1.8	mi	Residential-Urban	8	pc t
Shoreline Configuration	n 1.2		Residential-Suburban	31	pct
Development of Volume	0.47		Agricultural	9	pct
Bottom Slope	2.1	pct	Forest or Unproductive	37	pct
Surface Inflow	No		Lake Surface	15	pct
Surface Outflow	Yes				
			Public Boat Access to Lake	•	Yes

Date	July	1, 1	981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 18.8 10.3 78 7.2 0.05 .00 .06 .91 1.0 .01	16	46 7.9 0.2 83 6.6 .13 .02 .22 .77 1.1 .04 .04
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		10 <2	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		93	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		37 37 41	

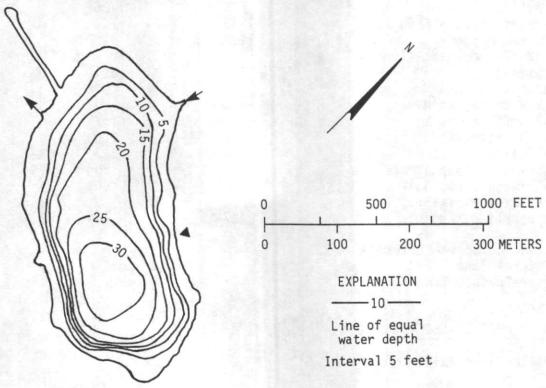




Silver (28N-5E-30) Lake, Snohomish County. Photo taken July 1, 1981, view northeasterly. Bathymetric map from Washington Department of Game, July 18, 1947.

STICKNEY LAKE	SNO	CHOMISH COUNTY	WR	RIA 08	
T28N-R04E-35	LATITUDE	470 52' 29"	LONGITUDE 1	220 15'	25"
PHYSICAL DATA		CULTURAL D	<u>ATA</u>		
Drainage area Altitude	3.56 mi ² 450 ft	Residentia	1 Development	60	pct
Lake Area	19 acres 280 acre-ft	Number of	Nearshore Hom	nes 27	
Mean Depth Maximum Depth	15 ft 34 ft	Land Use i	n Drainage Ba	asin	
Shoreline Length Shoreline Configuration		Resident	ial-Urban ial-Suburban	4 18	pct pct
Development of Volume Bottom Slope	0.45 3.4 pct		r Unproductiv		pct pct
Surface Inflow Surface Outflow	Yes Yes	Lake Sur		1	pct
		Public Boa	t Access to L	.ake	Yes
WATER-QUALITY DATA (in r	milligrams per	r liter unless	otherwise ind	licated)	
Date		July	1, 1981		
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (ur pH (units) Total Nitrate, as N Total Nitrite, as N	nho)	3 19.1 8.6 95 7.1 0.25 .01	30 6.7 0.3 106 6.7 .42 .03		
Total Ammonia, as N Total Organic Nitrogen,	as N	.08 1.0	.21 1.1		
Total Nitrogen, as N Dissolved Orthophosphate Total Phosphorus, as P	e, as P	1.4 .02 .02	1.8 .03 .04		
Secchi-Disc Visibility (Chlorophyll <u>a</u> (ug/L)	(ft)	2.14	7		
Aquatic Macrophyte Cover Littoral Zone Water-Surface Zone	rage		85 pct 10 pct		
LAKE TROPHIC CLASSIFICAT	<u> ION</u>				
Characteristic Value			142		
Trophic State Index (Car TSI _{SD}	rlson, 1977)		49		
TSI _{TP} TSI _{Chl}			47 38		





Stickney (28N-4E-35) Lake, Snohomish County. Photo taken July 1, 1981, view northwesterly. Bathymetric map from U.S. Geological Survey, April 17, 1973.

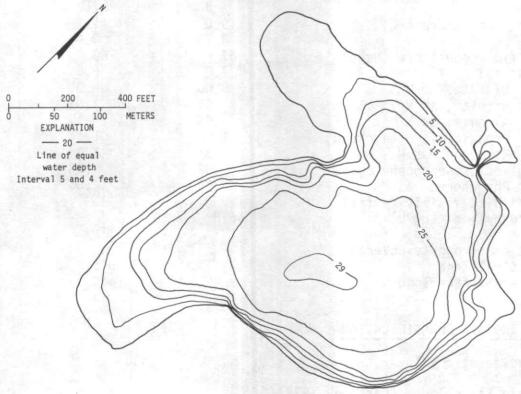
SWARTZ LAKE	SNOHOMISH COUNTY	WRIA 07
SMAKIZ LAKE	2401011231 6001411	MUTU OI

T30N-R07E-20 LATITUDE 480 04' 22" LONGITUDE 1210 56' 05"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	1.54		Residential Development	20	pct
Altitude	520	-		_	
Lake Area		acres	Number of Nearshore Homes	8	
Lake Volume		acre-ft			
Mean Depth		ft	Land Use in Drainage Basin		
Maximum Depth		ft			
Shoreline Length	1.07	mi	Residential-Urban	0	pct
Shoreline Configuration	1.6		Residential-Suburban	5	pct
Development of Volume	0.58		Agricultural	0	pct
Bottom Slope	2.5	pct	Forest or Unproductive	93	pct
Surface Inflow	Yes		Lake Surface	2	pct
Surface Outflow	Yes				•
			Public Boat Access to Lake		No

Date	July	7,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 17.8 11.2 54 6.7 0.19 .01 .06 .77 1.0 .00	8	26 7.0 0.2 110 6.4 .02 .02 1.7 1.0 2.7 .04
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		80 15	pct pct
Characteristic Value		122	
		1	
Trophic State Index (Carlson, 1977) TSI _{SD}		47	
TSITP TSICh1		37 46	
OII I			



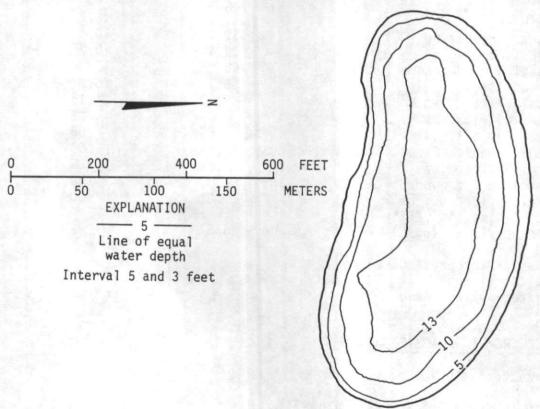


Swartz Lake, Snohomish County. Photo taken July 7, 1981, view northwesterly. Bathymetric map from U.S. Geological Survey, June 11, 1981.

THOMAS LAKE	SNO	HOMISH COUNTY WRIA	80	
T28N-R05E-33	LATITUDE	470 52' 07" LONGITUDE 1220	11' 0)1 "
PHYSICAL DATA		CULTURAL DATA		
Drainage area	0.74 mi ²	Residential Development	0	pct
Altitude Lake Area	387 ft 8 acres	Number of Nearshore Homes	0	
Lake Volume Mean Depth Maximum Depth	76 acre-ft 10 ft 13 ft	Land Use in Drainage Basin		
Shoreline Length	0.44 mi	Residential-Urban	0	pct
Shoreline Configuration	1.1 0.75	Residential-Suburban	15 27	pct
Development of Volume Bottom Slope	2.0 pct	Agricultural Forest or Unproductive	56	pct pct
Surface Inflow	No PCC	Lake Surface	2	pct
Surface Outflow	Yes			
		Public Boat Access to Lake		Мо
WATER-QUALITY DATA (in	milligrams per	· liter unless otherwise indica	ted)	
Date		Julv 1.1981		

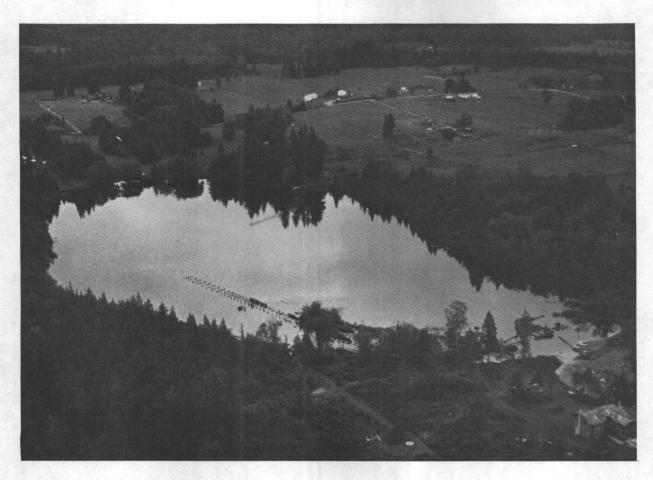
Date	July	١,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.0 8.1 67 7.0 0.00 .01 .05 1.8 1.8 .02 .06	3	12 11.1 0.4 68 6.5 .01 .01 .17 1.1 1.3 .03
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		20 1	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		530	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		61 63 72	

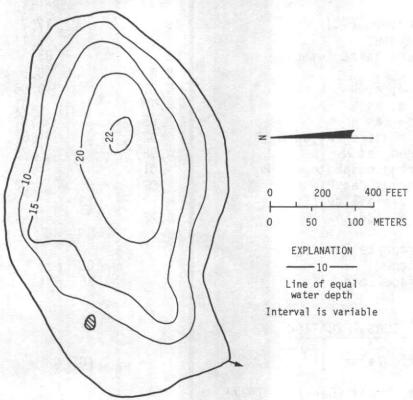




Thomas Lake, Snohomish County, Photo taken July 1, 1981, view southwesterly. Bathymetric map from U.S. Geological Survey, June 12, 1981.

WAGNER LAKE	SNC	HOMISH COUNTY	WRIA	07	
T28N-R07E-29	LATITUDE	470 52' 55"	LONGITUDE 1210	56'	03"
PHYSICAL DATA		CULTURAL [DATA		
Drainage area	0.47 mi ²	Residentia	al Development	20	pct
Altitude Lake Area	300 ft 22 acres	Number of	Nearshore Homes	6	
Lake Volume Mean Depth	283 acre-ft 13 ft	Land Use	in Drainage Basin		
Maximum Depth	22 ft 0.74 mi		tial-Urban	0	pct
Shoreline Length Shoreline Configuration	1.1	Residen	tial-Suburban	31	pct
Development of Volume Bottom Slope	0.58 2.0 pct	Agricul ^a Forest o	tural or Unproductive	0 63	
Surface Inflow	No	Lake Sui		6	pct
Surface Outflow	Yes	Public Bo	at Access to Lake		Yes
WATER-QUALITY DATA (in	milligrams pe	r liter unless	otherwise indica	ted)	
Date		July	7, 1981		
Depth (ft)		3	17		
Water Temperature (°C) Dissolved Oxygen		19.0 9.4	10.4 0.2		
Specific Conductance (u	mho)	45	47		
pH (units) Total Nitrate, as N		6.7 0.00	6.2 .15		
Total Nitrite, as N		.01	.02		
Total Ammonia, as N Total Organic Nitrogen,	ae N	.09 .54	.08 .63		
Total Nitrogen, as N	d 5 14	.64	.88		
Dissolved Orthophosphat	e, as P	.00	.00 .00		
Total Phosphorus, as P Secchi-Disc Visibility	(ft)	. 01	10		
Chlorophyll <u>a</u> (ug/L)	(10)	6.57			
Aquatic Macrophyte Cove	erage		• •		
Littoral Zone			15 pct <2 pct		
Water-Surface Zone			TE per		
LAKE TROPHIC CLASSIFICA	ATION		•		
Characteristic Value			98		
Trophic State Index (Ca	arlson, 1977)		•		
TŠI _{SD}			44 37		
TSITP TSICHI			49		





Wagner Lake, Snohomish County. Photo taken July 7, 1981, view southeasterly. Bathymetric map from Washington Department of Game, May 24, 1949.

ELOIKA LAKE	SPOKANE COUNTY	WRIA	55
	SI OKANE GOORTI	MIVTU	

T29N-R43E-15 LATITUDE 480 00' 34" LONGITUDE 1170 21' 52"

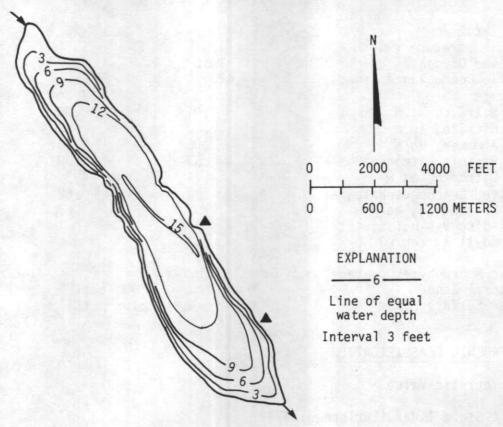
PHYSICAL DATA		CULTURAL DATA		
Drainage area	111 mi ²	Residential Development	30	pct
Altitude	1,905 ft	No. A C. Maranahana . Hana	50	
Lake Area Lake Volume	660 acres 6,000 acre-ft	Number of Nearshore Homes	50	
Mean Depth	9 ft	Land Use in Drainage Basin		
Maximum Depth	15 ft	Take too in Diamage baom		
Shoreline Length	5.9 mi	Residential-Urban	0	pct
Shoreline Configuration	on 1.6	Residential-Suburban	<1	pct

Development of Volume 0.61 Agricultural 8 pct Bottom Slope 0.25 pct Forest or Unproductive 89 pct Surface Inflow Yes Lake Surface 3 pct

Surface Outflow Yes Public Boat Access to Lake Yes

Date	July	13,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.8 9.8 82 8.4 0.01 .00 .05 .92 .98 .01 .02	13	11 17.7 3.1 83 8.6 0.00 .01 .07 .67 .75 .02
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		100 35	pct pct
Characteristic Value		107	
Trophic State Index (Carlson, 1977)			
TSI _{SD} TSI _{TP} TSI _{Ch1}		40 47 43	





Eloika Lake, Spokane County. Photo taken June 20, 1978.

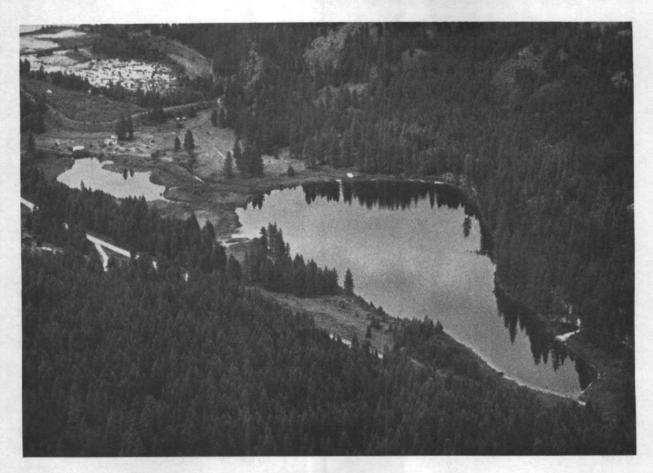
Bathymetric map from Washington Department of Game, January 29, 1958.

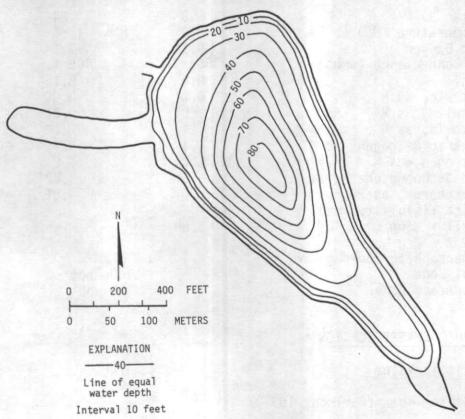
BROWNS LAKE	STEVENS COUNTY	WRIA 59)

T32N-R40E-31 LATITUDE 480 13' 58" LONGITUDE 1170 48' 20"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	4.52		Residential Development	0	pct
Altitude	2,037	ft			
Lake Area	21	acres	Number of Nearshore Homes	0	
Lake Volume	675	acre-ft			
Mean Depth	32	ft	Land Use in Drainage Basin		
Maximum Depth	82	ft	· ·		
Shoreline Length	1.1	mi	Residential-Urban	0	pc t
Shoreline Configuration	1.7		Residential-Suburban	0	pct
Development of Volume	0.39		Agricultural	0	pct
Bottom Slope	7,6	pct	Forest or Unproductive	98	pct
Surface Inflow	Yes		Lake Surface	2	pc t
Surface Outflow	Yes		· · ·		•
			Public Boat Access to Lake	,	Yes

Date	July	/ 14,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.1 10.6 420 8.3 0.01 .00 .06 .67 .74 .02 .01	27	75 5.5 0.1 700 7.2 .00 .00 4.5 .00 4.3 .62 .67
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		90 ∠10	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		54	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		30 37 24	





Browns Lake, Stevens County. Photo taken July 14, 1981, view northerly. Bathymetric map from Washington Department of Game, March 10, 1952.

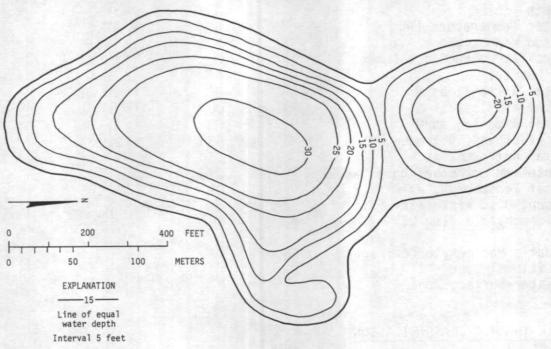
BUZZARD LAKE	STEVENS COUNTY	WRIA	59

T31N-R41E-14 LATITUDE 480 11' 08" LONGITUDE 1170 35' 22"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	0.22		Residential Development	0	pct
Altitude Lake Area		acres	Number of Nearshore Homes	0	
Lake Volume Mean Depth		acre-ft ft	Land Use in Drainage Basin		
Maximum Depth Shoreline Length	30 0.67	ft	Residential-Urban	0	pct
Shoreline Configuration	n 1.3		Residential-Suburban	0	pct
Development of Volume Bottom Slope	0.50 3.5	pct	Agricultural Forest or Unproductive	6 85	pct pct
Surface Inflow Surface Outflow	No No	•	Lake Surface	9	pct
Surface outlion	MO		Public Boat Access to Lake		No

Date	July	14,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 18.2 9.5 365 8.4 0.01 .01 .12 1.1 1.2 .01 .01	17	24 11.5 7.1 405 8.1 0.00 .01 .09 1.1 1.2 .02
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		100 10	pct pct
Characteristic Value		101	
Trophic State Index (Carlson, 1977) TSISD TSITP TSICH1		36 37 35	





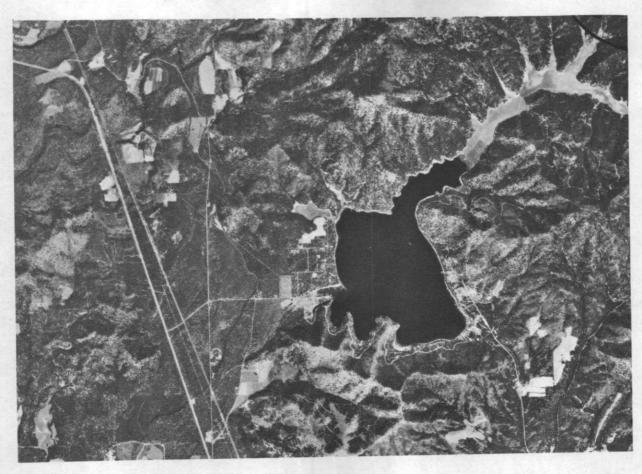
Buzzard Lake, Stevens Lake. Photo taken July 14, 1981, view southwesterly. Bathymetric map from Washington Department of Game, January 13, 1947.

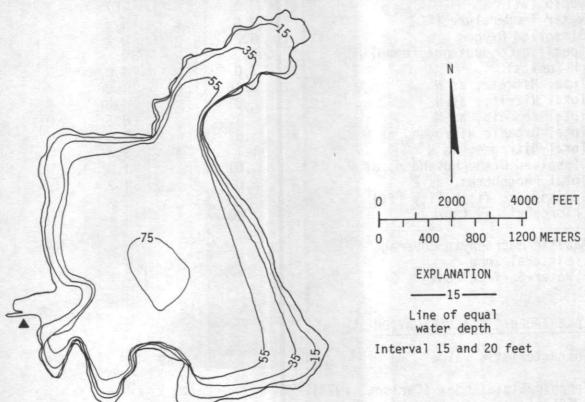
DEER LAKE	STEVENS COUNTY	WRIA	59

T30N-R41E-11 LATITUDE 480 06' 28" LONGITUDE 1170 36' 18"

		CULTURAL DATA		
-		Residential Development	85	pct
1,100	acres	Number of Nearshore Homes	376	
		Land Use in Drainage Basin		
		•	Λ	4
n 1.8	1111	Residential-Suburban	4	pct pct
	nct	Agricultural Forest or Unproductive		pct
No	pcc	Lake Surface	10	pct pct
Yes		Public Roat Access to Lake	,	Yes
	2,474 1,100 57,000 52 75 8.6 n 1.8 0.69 0.96	0.69 0.96 pct No	18.2 mi ² 2,474 ft 1,100 acres 57,000 acre-ft 52 ft 75 ft 8.6 mi n 1.8 0.69 0.96 pct No Residential Development Land Use in Drainage Basin Residential - Urban	18.2 mi ² 2,474 ft 1,100 acres 57,000 acre-ft 52 ft 75 ft 8.6 mi 1.8 Residential Development 85 Residential Development 87 Residential Development 85 Residential Development 85 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 85 Land Use in Drainage Basin 9 Residential Development 9 Residential

· · ·			
Date	Jι	ıly 14,	1981
Depth (ft) Water Temperature (OC) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 17.5 9.1 79 7.5 0.02 .00 .08 .65 .75 .02 .01	27	70 5.5 2.5 81 6.9 0.01 .00 .64 .71 .02
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		10 < 5	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		54	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		30 37 30	





Deer Lake, Stevens County. Photo taken August 1, 1977.
Bathymetric map from Washington Department of Game, February 22, 1955.

K	F	nG	н	1	AK	F
\mathbf{r}	E.	UU	п	L	MN	E

STEVENS COUNTY

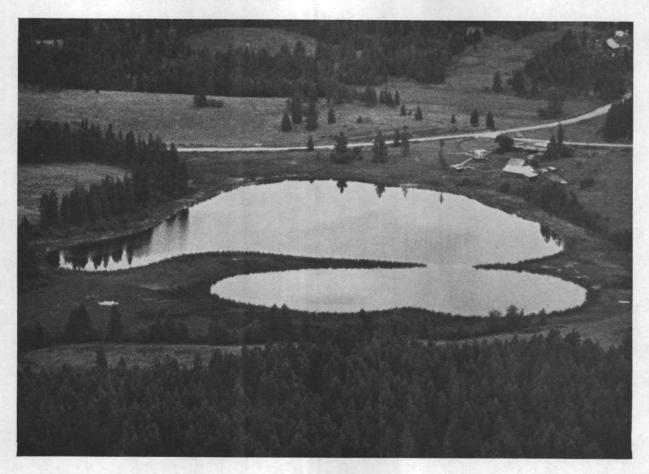
WRIA 59

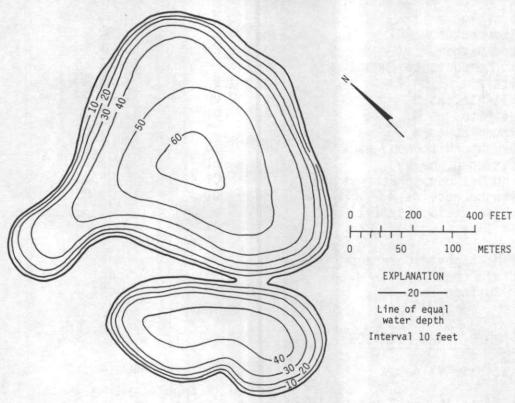
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LATITUDE 480 30' 44" LONGITUDE 1170 48' 31"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	5.75		Residential Development	5	pct
Altitude Lake Area	2,180 18	ft acres	Number of Nearshore Homes	ו	•
Lake Volume Mean Depth	660	acre-ft ft		ı	
Maximum Depth	60	ft	Land Use in Drainage Basin		
Shoreline Length	0.90	mi	Residential-Urban	0	pct
Shoreline Configuration			Residential-Suburban	1	pct
Development of Volume	0.61		Agricultural	7	pct
Bottom Slope		pct	Forest or Unproductive	91	pct
Surface Inflow	No		Lake Surface]	pct
Surface Outflow	Yes				•
			Public Boat Access to Lake		No

Date	July	14,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.0 8.2 600 7.0 0.10 .01 .10 .87 1.1 .01	16	57 5.6 0.2 740 7.0 .00 .01 8.5 1.0 9.5 1.0
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		100 10	pct pct
Characteristic Value		89	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		37 37 39	





Keogh Lake, Stevens County. Photo taken July 14, 1981, view northeasterly. Bathymetric map from Washington Department of Game, March 15, 1950.

LOON LAKE	S	TEVENS COUNTY	1	WRIA !	59	
T30N-R41E-33	LATITUDE	480 03' 20"	LONGITUDE	1170	38'	30"
PHYSICAL DATA		CULTURAL D	DATA			
Drainage area	14.1 mi ²	Residentia	al Developme	nt	85	pct
Altitude Lake Area Lake Volume	2,381 ft 1,100 acres 52,000 acre-ft	Number of	Nearshore H	omes (459	
Mean Depth	46 ft 100 ft	Land Use i	in Drainage 1	Basin		
Maximum Depth Shoreline Length	7.9 mi	Resident	tial-Urban		0	pct
Shoreline Configurat			tial-Suburba	1	4	pc t
Development of Yolum		Agricult	tural		13	pct

Forest or Unproductive Lake Surface

Public Boat Access to Lake

71

12

pct

pct

Yes

WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

5.4 pct

Yes

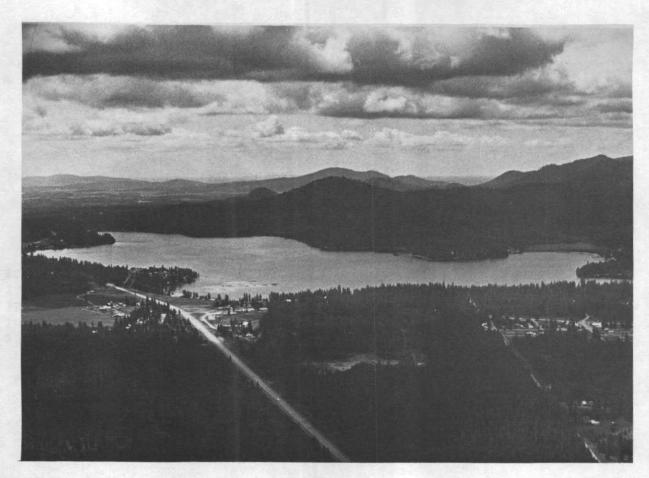
Yes

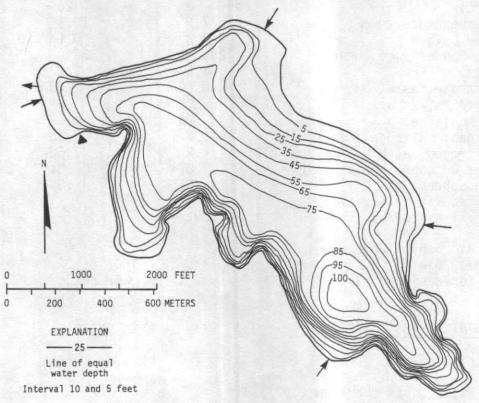
Bottom Slope

Surface Inflow

Surface Outflow

Date	July	14,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 18.0 9.2 165 7.9 0.00 .01 .07 .73 .81 .01	21	85 6.0 3.3 172 7.2 0.06 .01 .25 .47 .79 .00
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		10 <5	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		64	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Chl}		33 37 23	





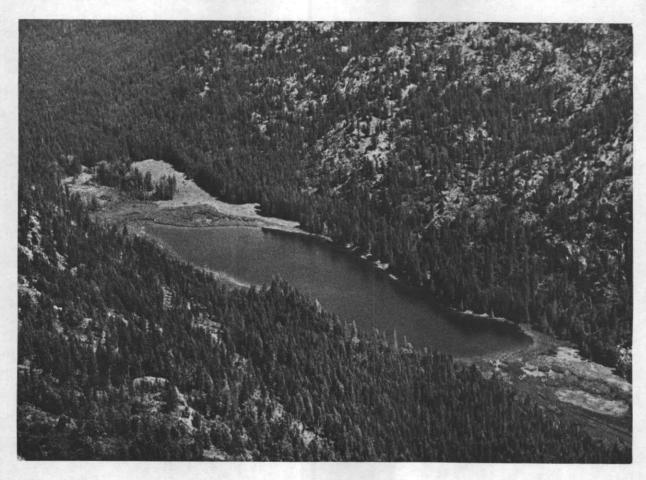
Loon Lake, Stevens County. Photo taken July 11, 1981, view southerly. Bathymetric map from Washington Department of Game, February 14, 1955.

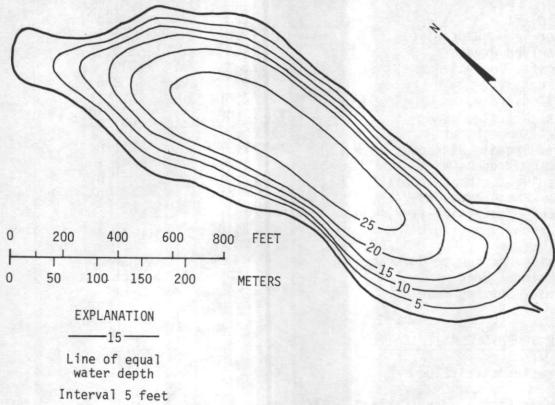
PHALON LAKE	STEVENS COUNTY	WRIA	61
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T38N-R39E-21 LATITUDE 480 46' 50" LONGITUDE 1170 53' 45"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	2.1		Residential Development	0	pct
Altitude Lake Area	2,380	ft acres	Number of Nearshore Homes	0	
Lake Volume		acre-ft	MUMBER OF MERISHOLE HOMES	J	
Mean Depth	15		Land Use in Drainage Basin		
Maximum Depth Shoreline Length	25 0.95		Residential-Urban	0	pct
Shoreline Configuration		1111	Residential-Suburban	ŏ	pct
Development of Volume	0.59		Agricultural	0	pct
Bottom Slope	2.1	pct	Forest or Unproductive	98	pct
Surface Inflow	Yes		Lake Surface	2	pct
Surface Outflow	Yes				
			Public Boat Access to Lake		No

Date	July	15,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 17.9 8.3 285 7.4 0.00 .00 .08 1.1 1.2 .01 .01	15	26 10.4 0.1 330 7.1 .00 .01 .03 .53 .56 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		100 < 5	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		106	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		38 37 37	





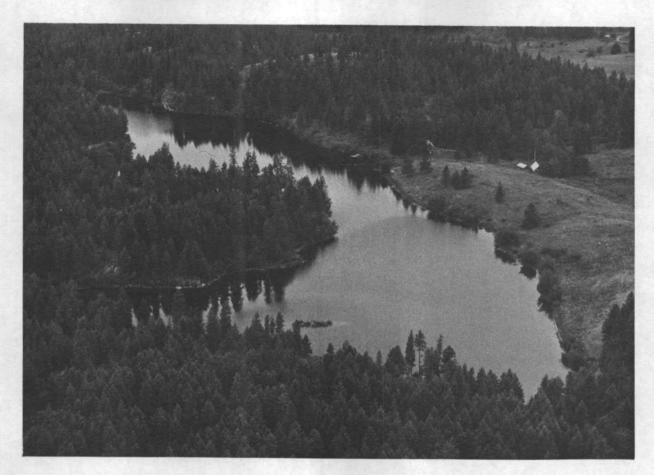
Phalon Lake, Stevens County. Photo taken July 15, 1981, view northeasterly. Bathymetric map from Washington Department of Game, February 8, 1958.

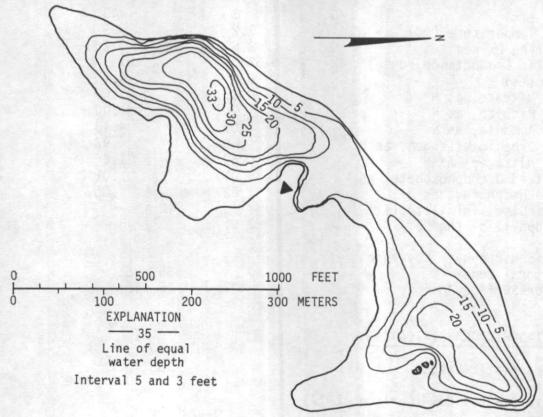
RUCKY LAKE SIEVENS COUNTY WKIA	ROCKY LAKE	STEVENS COUNTY	WRIA	59
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T35N-R39E-34 LATITUDE 480 29' 37" LONGITUDE 1170 52' 26"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	0.28		Residential Development	0	pct
Altitude	2,220				
Lake Area		acres	Number of Nearshore Homes	1	
Lake Volume	218	acre-ft			
Mean Depth	11	ft	Land Use in Drainage Basin		
Maximum Depth	33	ft			
Shoreline Length	1.20	mi	Residential-Urban	0	pct
Shoreline Configuratio	n 1.9		Residential-Suburban	0	pc t
Development of Volume	0.33		Agricultural	43	pct
Bottom Slope	3.1	pct	Forest or Unproductive	47	pct
Surface Inflow	No	•	Lake Surface	10	pct
Surface Outflow	No				•
			Public Boat Access to Lake	,	Yes

Date	Jul	y 14,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.8 11.4 725 9.3 0.01 .00 .07 1.7 1.8 .01 .01	13	28 6.7 0.4 800 8.6 .01 .00 .27 1.8 2.1 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		95 < 10	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		157	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		40 37 38	





Rocky Lake, Stevens County. Photo taken July 14, 1981, view westerly. Bathymetric map from U.S. Geological Survey, June 30, 1981.

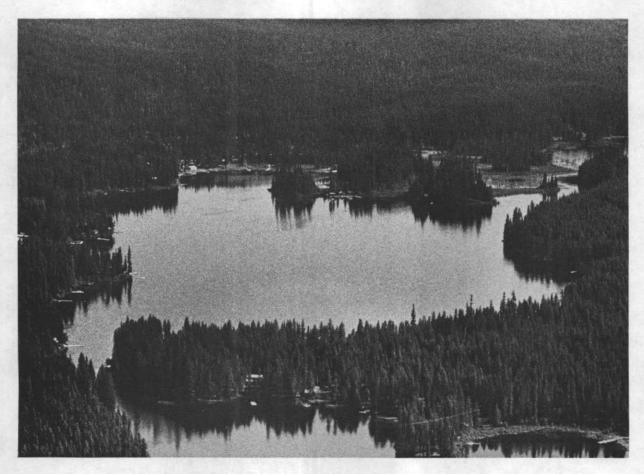
THOMAS LAKE	STEVENS COUNTY	WRIA	59
LITUMAS LANE	JIETENS COOK!!		

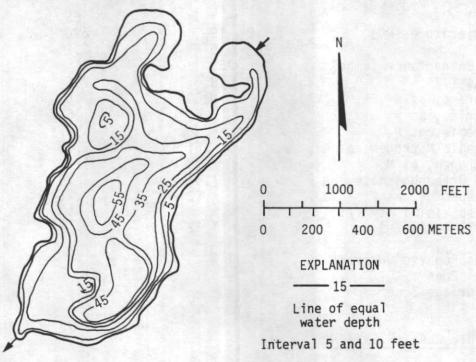
T36N-R42E-18 LATITUDE 480 37' 07" LONGITUDE 1170 32' 39"

PHYSICAL DATA		CULTURAL DATA		
Drainage area	12.7 mi ²	Residential Development	80	pct
Altitude	3,147 ft 170 acres	Number of Nearshore Homes	80	
Lake Area Lake Volume	4,000 acre-ft	Number of Mear Shore nomes	00	
Mean Depth	23 ft	Land Use in Drainage Basin		
Maximum Depth	55 ft			
Shoreline Length	3.3 mi	Residential-Urban	0	pct
Shoreline Configurati	on 1.8	Residential-Suburban	1	pct
Development of Volume	0.42	Agricultural	0	pct
Bottom Slope	1.8 pct	Forest or Unproductive	95	pct
Surface Inflow	Yes	Lake Surface	4	pct
Surface Outflow	Yes			
		Public Boat Access to Lake		Yes

$\underline{\text{WATER-QUALITY DATA}} \text{ (in milligrams per liter unless otherwise indicated)}$

Date	July	15, 1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 17.2 8.6 52 6.8 0.00 .00 .09 .60 .69 .01 .02	40 6.9 0.2 61 6.4 .05 .00 .13 .97 1.2 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		85 pct 25 pct
LAKE TROPHIC CLASSIFICATION		
Characteristic Value		85
Trophic State Index (Carlson, 1977) TSISD TSITP TSICH1		41 47 41





Thomas Lake, Stevens County. Photo taken July 15, 1981, view northerly. Bathymetric map from Washington Department of Game, March 11, 1950.

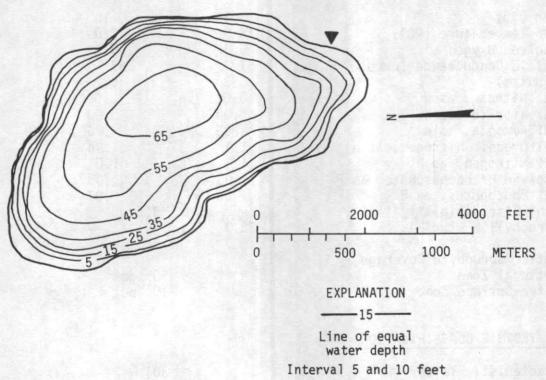
WAITTS LAKE	STEVENS COUNTY	WRIA	59
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T31N-R40E-17 LATITUDE 480 11' 09" LONGITUDE 1170 46' 48"

PHYSICAL DATA		CULTURAL DATA		
Drainage area	11.7 mi ²	Residential Development	55	pct
Altitude Lake Area	1,946 ft 470 acres	Number of Nearshore Homes	67	
Lake Volume Mean Depth	19,000 acre-ft 40 ft	Land Use in Drainage Basin		
Maximum Depth	68 ft	•	_	
Shoreline Length	3.3 mi	Residential-Urban	0	pct
Shoreline Configurati		Residential-Suburban	1	pct
Development of Volume	0.59	Agricultural	14	pct
Bottom Slope	1.3 pct	Forest or Unproductive	79	pct
Surface Inflow	Yes	Lake Surface	6	pct
Surface Outflow	Yes			•
		Public Boat Access to Lake	,	Yes

Date	July	14,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.1 9.6 259 8.4 0.00 .01 .08 .61 .70 .01	17	65 6.0 0.2 300 7.3 .00 .01 .87 .63 1.5 .14
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		75 < 5	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		68	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		36 47 35	





Waitts Lake, Stevens County. Photo taken August 1, 1977.
Bathymetric map from Washington Department of Game, February 9, 1954.

BIGELOW LAKE	TH	URSTON COUNTY	WRIA	13	
T18N-R02W-12	LATITUDE	470 03' 23" LONG	GITUDE 1220	51 '	57"
PHYSICAL DATA		CULTURAL DATA			
Drainage area	0.38 mi ²	Residential Dev	/elopment	0	pct
Altitude Lake Area Lake Volume	151 ft 13 acres 124 acre-ft	Number of Nears	shore Homes	0	
Mean Depth Maximum Depth	10 ft 15 ft	Land Use in Dra	ainage Basin		
Shoreline Length	0.65 mi	Residential-U	Jrban	0	pct
Shoreline Configuration	1.3	Residential-S		38	pct
Development of Volume	0.64	Agricultural		0	pct
Bottom Slope	1.8 pct	Forest or Unp	roductive	57	pct
Surface Inflow	No	Lake Surface		5	pct

Public Boat Access to Lake

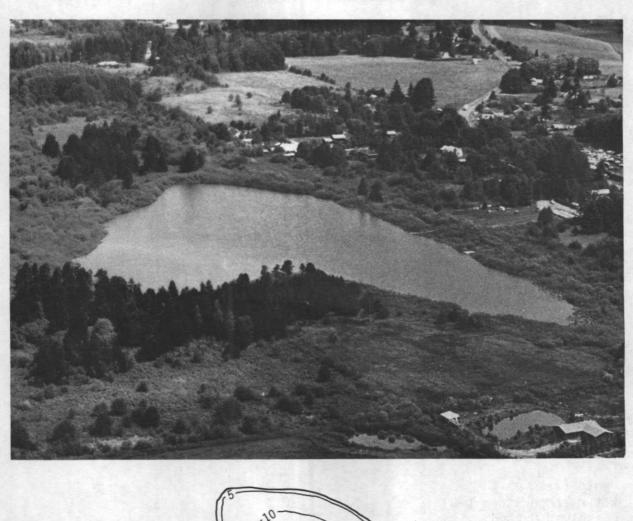
No

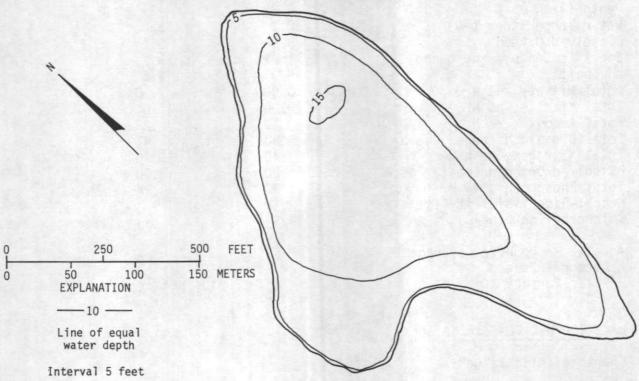
WATER-QUALITY DATA (in milligrams per liter unless otherwise indicated)

Yes

Surface Outflow

Date	June	10, 1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 16.3 6.3 57 6.3 0.02 .00 .05 1.1 1.1 .03 .06	10 12.0 0.2 67 6.2 .00 .06 .94 1.0 .03
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		90 pct 10 pct
LAKE TROPHIC CLASSIFICATION		
Characteristic Value		304
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		59 63 61





Bigelow Lake, Thurston County. Photo taken June 10, 1981, view northeasterly. Bathymetric map from U.S. Geological Survey, June 2, 1981.

BLACK LAKE	THURSTON COUNTY	WRIA	13

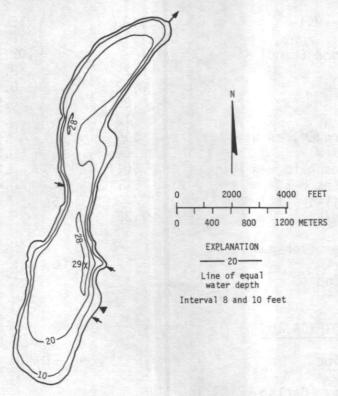
T18N-R02W-32 LATITUDE 470 00' 36" LONGITUDE 1220 57' 50"

PHYSICAL DATA			CULTURAL DATA		
Drainage area Altitude	10.1		Residential Development	85	pct
Lake Area		acres	Number of Nearshore Homes	140	
Lake Volume Mean Depth	19		Land Use in Drainage Basin		
Maximum Depth Shoreline Length	29 6.0	_	Residential-Urban	1	pct
Shoreline Configuration Development of Volume			Residential-Suburban Agricultural	2 33	pct pct
Bottom Slope Surface Inflow	2.8 Yes	pct	Forest or Unproductive Lake Surface	55 9	pct
Surface Outflow	Yes		-		pct
			Public Boat Access to Lake	1	'es

$\underline{\textit{WATER-QUALITY DATA}} \text{ (in milligrams per liter unless otherwise indicated)}$

Date	July	21,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 20.1 8.9 71 5.9 0.00 .00 .12 .30 .42 .00	9	25 15.0 0.1 79 6.6 .00 .01 .28 .41 .70 .00
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		40 10	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		94	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		45 0 53	

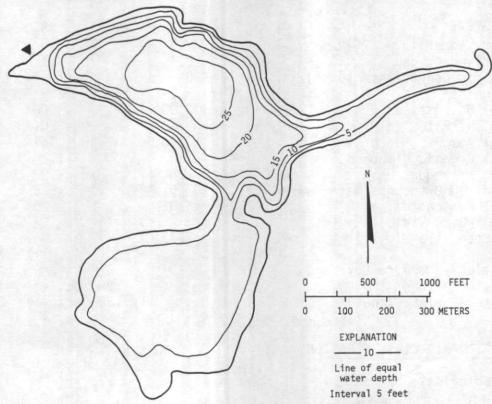




Black Lake, Thurston County. Photo taken July 21, 1981, view southerly. Bathymetric map from U.S. Geological Survey, August 23, 1971.

ELBOW LAKE	Th	HURSTON COUNTY	/ WRI	IA 11	
T16N-R03E-32	LATITUDE	460 49' 59"	LONGITUDE 12	220 27'	15"
PHYSICAL DATA		CULTURAL	DATA		
Drainage area Altitude	0.44 mi ² 479 ft	Residenti	ial Development	0	pct
Lake Area Lake Volume	86 acres 920 acre-ft	Number of	F Nearshore Home	es O	
Mean Depth Maximum Depth	11 ft 25 ft	Land Use	in Drainage Bas	sin	
Shoreline Configuration	2.8 mi 2.1	Residen	itial-Urban itial-Suburban	0	pct pct
Development of Volume Bottom Slope	1.1 pct		or Unproductive	0 e 69	•
Surface Inflow Surface Outflow	No Yes	Lake Su	errace oat Access to La	31	pct Yes
		rubiic bu	at Access to La	ike	1.62
WATER-QUALITY DATA (in r	milligrams per	liter unless	otherwise indi	icated)	
Date		June	4, 1981		
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (urpH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, Total Nitrogen, as N Dissolved Orthophosphate Total Phosphorus, as P Secchi-Disc Visibility Chlorophyll a (ug/L) Aquatic Macrophyte Cover Littoral Zone Water-Surface Zone	as N e, as P (ft)	3 17.9 11.1 101 8.2 0.02 .00 .18 .44 .64 .01	21 15.8 6.7 102 8.0 0.02 .00 .19 .44 .65 .01 .02		
LAKE TROPHIC CLASSIFICAT	TION				
Characteristic Value			51		
Trophic State Index (Car TSI _{SD} TSI _{TP} TSI _{Ch1}	~1son, 1977)		35 37 39		





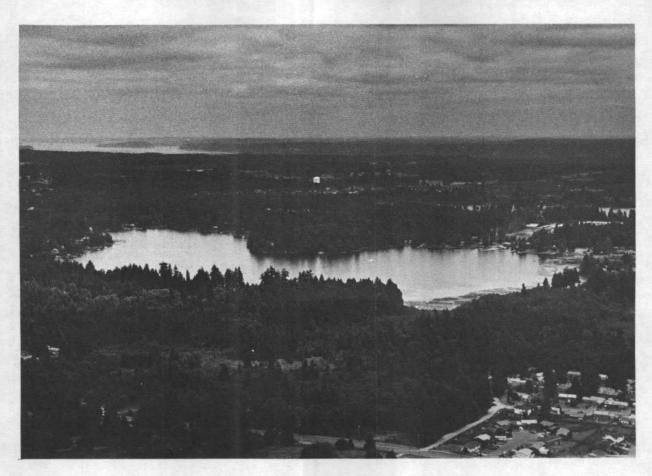
Elbow Lake, Thurston County. Photo taken August 16, 1974, view northerly. Bathymetric map from U.S. Geological Survey, February 6, 1974.

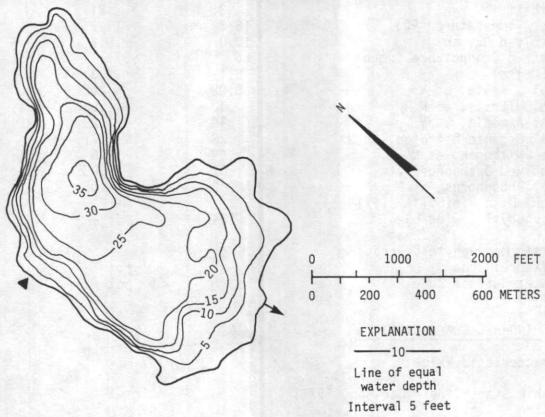
HICKS LAKE	THURSTON COUNTY	WRIA	13
MICKS LAKE	THORSION COUNTY	MVTW	13

T18N-R01W-27 LATITUDE 470 01' 02" LONGITUDE 1220 47' 42"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	1.80		Residential Development	80	pct
Altitude Lake Area	162 160	tt acres	Number of Nearshore Homes	100	
Lake Volume Mean Depth		acre-ft ft	Land Use in Drainage Basin		
Maximum Depth	35	ft	•		
Shoreline Length	2.4	mi	Residential-Urban	16	pct
Shoreline Configuration	n 1.4		Residential-Suburban	33	pct
Development of Volume	0.51		Agricultural	31	pct
Bottom Slope	1.2	pct	Forest or Unproductive	6	pct
Surface Inflow	No		Lake Surface	14	pc t
Surface Outflow	Yes				
			Public Boat Access to Lake	,	Yes

Date	July	21,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 20.3 9.4 28 8.0 0.00 .00 .16 1.6 1.8 .01 .02	11	33 10.6 0.1 41 6.8 .00 .01 .67 1.2 1.9 .18 .25
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		90 30	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		178	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		43 47 51	

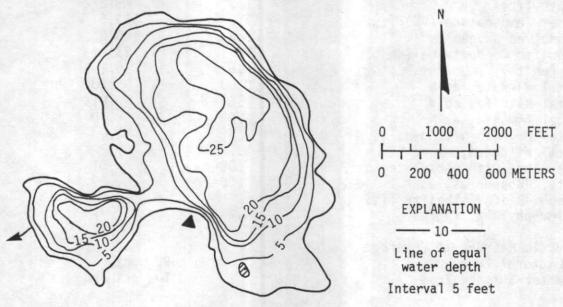




Hick Lake, Thurston County. Photo taken July 21, 1981, view northeasterly. Bathymetric map from Washington Department of Game, June 12, 1949.

LAWRENCE LAKE	TH	IURSTON C	OUNTY		WRIA	13	
T16N-R02E-29	LATITUDE	460 50'	57"	LONGITUDE	1220	34 '	51 "
PHYSICAL DATA		CULT	URAL DA	<u>ATA</u>			
	35 mi ² 21 ft	Resi	dential	Developm	ent	50	pct
1 1 0	20	Numb	er of N	learshore	Homes	120	
mean bepon	acres acre-ft state ft ft ft	Land	Use in	Drainage	Basin		
Shoreline Length 4. Shoreline Configuration 1.	.0 mi 6			al-Urban al-Suburba	an	0 4	pct pct
Development of Volume 0.	51	Ag	ricultu	ıral		19	pct
	51 pct No		rest or ke Surf	Unproductace	tive	63 14	pct pct
Surface outilow 16	:5	Pub1	ic Boat	Access to	o Lake		Yes
WATER-QUALITY DATA (in mill	ligrams per	liter u	nless d	therwise	indicat	ted)	
Date		·	June 4	, 1981			
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as Total Nitrogen, as N Dissolved Orthophosphate, a Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L) Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone	N as P	3 18.3 10.0 66 8.1 0.02 .00 .19 .78 .99 .02		21 13.2 0.2 75 7.3 .02 .00 .29 .71 1.0 .03 .05 8			
LAKE TROPHIC CLASSIFICATION	•						
	-		_	0.7			
Characteristic Value			1	27			
Trophic State Index (Carlso TSI _{SD}	n, 1977)			47			
TSITP				47			
TSICHI				47			





Lawrence Lake, Thurston County. Photo taken August 12, 1977. Bathymetric map from Washington Department of Game, June 5, 1951.

SALININ LAVE	THURSTON COUNTY	WRIA 13
MUNN LAKE	INURSIUN COUNT	MKIW 19

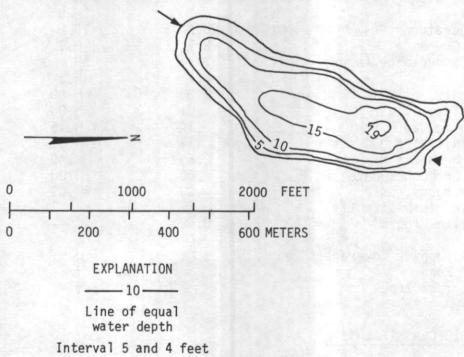
T17N-R02W-01 LATITUDE 460 58' 56" LONGITUDE 1220 52' 49"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	0.67		Residential Development	40	pct
Altitude Lake Area	139 34	ft acres	Number of Nearshore Homes	14	
Lake Volume		acre-ft		• •	
Mean Depth		ft	Land Use in Drainage Basin		
Maximum Depth Shoreline Length	1.1	ft mi	Residential-Urban	3	pct
Shoreline Configuration	1.3		Residential-Suburban	4	pct
Development of Volume	0.53		Agricultural	42	pct
Bottom Slope	1.4	pct	Forest or Unproductive	42	pct
Surface Inflow	Yes		Lake Surface	9	pct
Surface Outflow	No				
			Public Boat Access to Lake		Yes

WATER-QUALITY DATA (in mg/L unless otherwise indicated)

Date	June	9,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 17.2 9.3 20 6.6 0.00 .01 .09 1.6 1.7 .00 .06	5	12 13.5 0.2 23 6.1 .00 .01 .10 1.6 1.7 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		90 10	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		303	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		54 63 62	

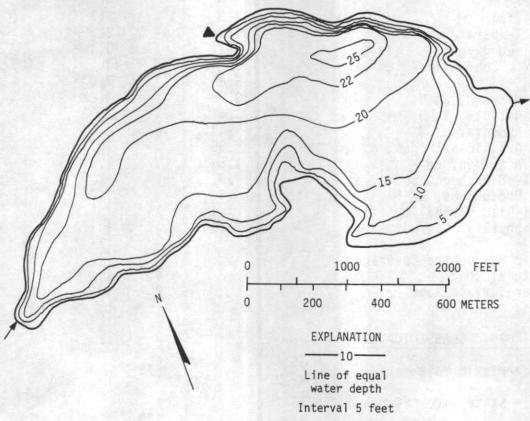




Munn Lake, Thurston County. Photo taken June 9, 1981, view southwesterly. Bathymetric map from Washington Department of Game, May 31, 1950.

OFFUTT LAKE	TH	HURSTON COUNTY	WRIA	13	
T17N-R01W-33	LATITUDE	460 55' 06"	LONGITUDE 1229	49'	04"
PHYSICAL DATA		CULTURAL D	ATA		
•	.70 mi ²	Residentia	l Development	50	pct
Lake Area	230 ft 200 acres 900 acre-ft	Number of	Nearshore Homes	68	
Mean Depth	15 ft 25 ft	Land Use i	n Drainage Basir	1	
Shoreline Length Shoreline Configuration Development of Volume Bottom Slope Surface Inflow	2.9 mi	Resident Agricult Forest o Lake Sur	r Unproductive	0 5 15 69 11	pct
WATER-QUALITY DATA (in mi	lligrams per	liter unless	otherwise indica	ated)	
Date		July 2	1, 1981		
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umhor ph (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Dissolved Orthophosphate, Total Phosphorus, as P Secchi-Disc Visibility (ft Chlorophyll a (ug/L) Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone	s N as P t)		20 15.0 0.1 68 6.6 .00 .00 .16 .33 .49 .00 .09 7		
LAKE TROPHIC CLASSIFICATION	<u>DN</u>				
Characteristic Value			106		
Trophic State Index (Carls TSI _{SD} TSI _{TP} TSI _{Ch1}	son, 1977)		49 0 52		

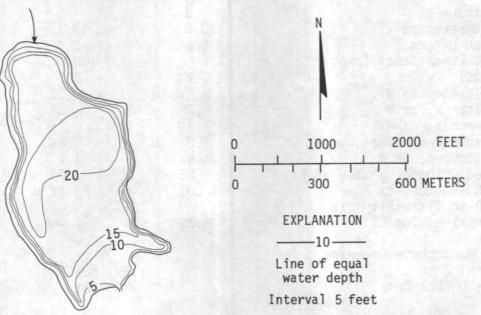




Offutt Lake, Thurston County. Photo taken May 19, 1978.
Bathymetric map from Washington Department of Game, May 24, 1949.

PATTERSON LAKE (NORTH ARM)	TH	URSTON COUNTY	WRIA	13	
T18N-R01W-34	LATITUDE	460 59' 48"	LONGITUDE 1220	46'	56"
PHYSICAL DATA		CULTURAL	DATA		
	90 mi ² 54 ft	Residenti	al Development	80	pct
	B1 acres D0 acre-ft	Number of	Nearshore Homes	75	
Mean Depth	14 ft 22 ft	Land Use	in Drainage Basin		
Shoreline Length 1. Shoreline Configuration 1. Development of Volume 0.0	.7 mi .3 53 .0 pct es	Residen Agricul Forest Lake Su	or Unproductive	11 23 21 32 13	pct pct
WATER-QUALITY DATA (in mil	ligrams per	liter unless	otherwise indica	ted)	
Date		July	21, 1981		
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umhor ph (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, Total Phosphorus, as P Secchi-Disc Visibility (ft Chlorophyll a (ug/L) Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone	N as P)	3 20.2 9.2 112 6.8 0.73 .01 .11 .65 1.5 .01	18 12.6 0.4 140 7.0 .22 .00 .11 1.2 1.5 .00 .09 14 90 pct 25 pct		
LAKE TROPHIC CLASSIFICATION	N				
Characteristic Value	_		75		
Trophic State Index (Carlse TSI _{SD} TSI _{TP} TSI _{Chl}	on, 1977)	·	39 0 41		



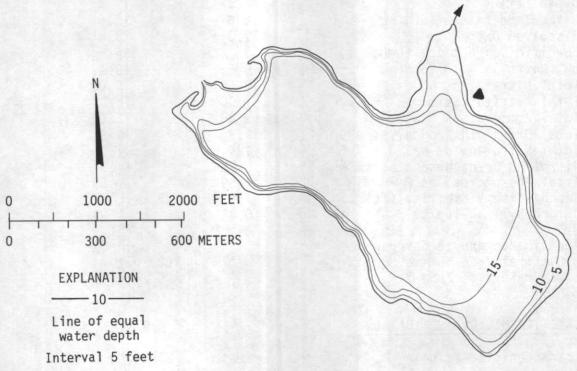


Patterson (north arm) Lake, Thurston County. Photo taken May 18, 1978. Bathymetric map from U.S. Geological Survey, December 12, 1973.

PATTERSON LAKE (SOUTH AR	M) TH	JURSTON COUNTY	WRIA	13	
T18N-R01W-35	LATITUDE	460 59' 54"	LONGITUDE 1220	46 '	15"
PHYSICAL DATA		CULTURAL D	ATA		
	3.77 mi ² 154 ft	Residentia	l Development	60	pct
Lake Area	190 acres ,500 acre-ft	Number of	Nearshore Homes	85	
Mean Depth	13 ft 19 ft	Land Use i	n Drainage Basin		
Shoreline Length	4.6 mi	Resident	ial-Urban	8	pct
Shoreline Configuration Development of Volume	2.4 0.70		ial-Suburban	20	pct
	0.70 0.59 pct	Agricult	ura: or Unproductive	16 35	pct
Surface Inflow	Yes	Lake Sur		21	pct pct
Surface Outflow	Yes				poo
		Public Boa	t Access to Lake		Yes
WATER-QUALITY DATA (in m	illigrams per	liter unless	otherwise indicat	ted)	
Date		July 2	1, 1981		
Depth (ft)		3	15		
Water Temperature (°C)		20.6	18.1		
Dissolved Oxygen	1	8.8	5.4		
Specific Conductance (uml pH (units)	10)	122 7.2	130 6.9		
Total Nituata as N		7.2	0.9		

Date	July	y 21,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 20.6 8.8 122 7.2 0.16 .01 .19 1.0 1.4 .03 .03	>17	15 18.1 5.4 130 6.9 0.32 .01 .25 .49 1.1 .03
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		95 20	pct pct
Characteristic Value		106	
		106	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		36 53 43	





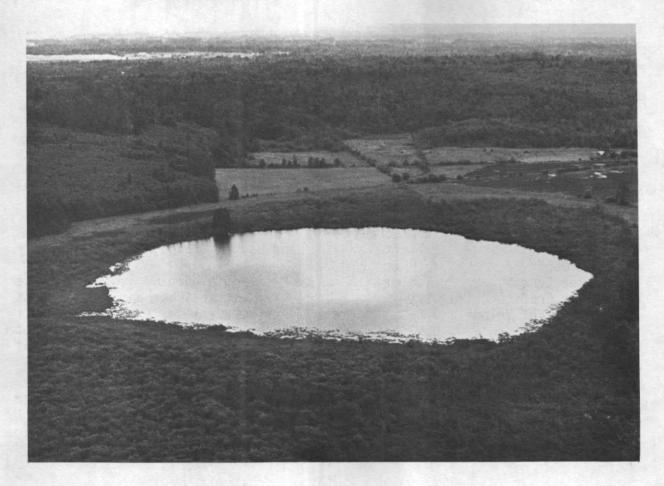
Patterson (south arm) Lake, Thurston County. Photo taken May 18, 1978. Bathymetric map from U.S. Geological Survey, December 12, 1973.

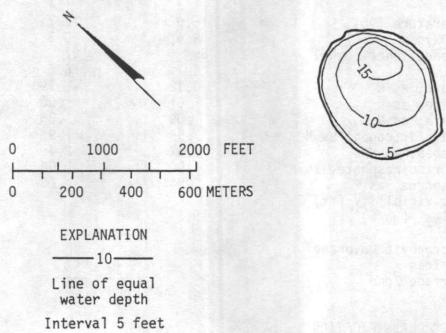
T17N-R02W-35 LATITUDE 460 55' 01" LONGITUDE 1220 53' 22"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	2.57		Residential Development	0	pct
Altitude Lake Area		ft acres	Number of Nearshore Homes	0	
Lake Volume	320	acre-ft	Manuel of Meat Store Homes	Ū	
Mean Depth Maximum Depth		ft ft	Land Use in Drainage Basin		
Shoreline Length	0.85		Residential-Urban	0	pct
Shoreline Configuration			Residential-Suburban	0	pct
Development of Volume	0.60		Agricultural	18	pct
Bottom Slope	1.2	pct	Forest or Unproductive	80	pct
Surface Inflow	Yes		Lake Surface	2	pct
Surface Outflow	Yes				•
			Public Boat Access to Lake		No

23

Date	June	9,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 16.0 7.0 55 6.6 0.00 .00 .09 1.3 1.4 .05 .09	5	9 15.6 3.4 56 6.4 0.03 .00 .06 1.8 1.9 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		100 5	pct pct
Characteristic Value		244	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		54 69 54	





Pitman Lake, Thurston County. Photo taken June 9, 1981, view northeasterly. Bathymetric map from U.S. Geological Survey, January 16, 1974.

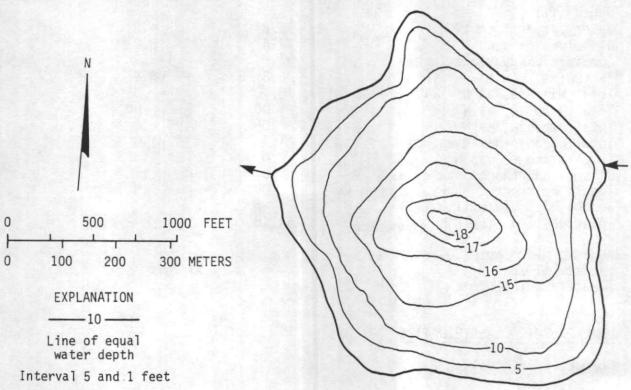
SCOTT LAKE	THURSTON COUNTY	WRIA	23
SCOTT LAKE	HIDOSTOR COURT	MINAM	

T17N-R02W-33 LATITUDE 460 55' 12" LONGITUDE 1220 56' 07"

PHYSICAL DATA		CULTURAL DATA		
.Drainage area	2.52 mi ²	Residential Development	75	pct
Altitude	189 ft			
Lake Area	69 acres	Number of Nearshore Homes	23	
Lake Volume	760 acre-ft			
Mean Depth	11 ft	Land Use in Drainage Basin		
Maximum Depth	18 ft			
Shoreline Length	1.3 mi	Residential-Urban	0	pct
Shoreline Configuration	1.1	Residential-Suburban	1	pct
Development of Volume	0.69	Agricultural	26	pct
Bottom Slope	0.92 pct	Forest or Unproductive	65	pct
Surface Inflow	Yes `	Lake Surface	8	pct
Surface Outflow	Yes			
		Public Boat Access to Lake	•	Yes

Date	June	9,	1 981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 15.9 9.6 89 6.7 0.18 .01 .09 .59 .87 .00	5	14 12.7 0.3 97 6.6 .19 .00 .33 1.9 2.4 .00
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		80 5	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		203	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		54 57 59	





Scott Lake, Thurston County. Photo taken May 19, 1978. Bathymetric map from Washington Department of Game, May 27, 1950.

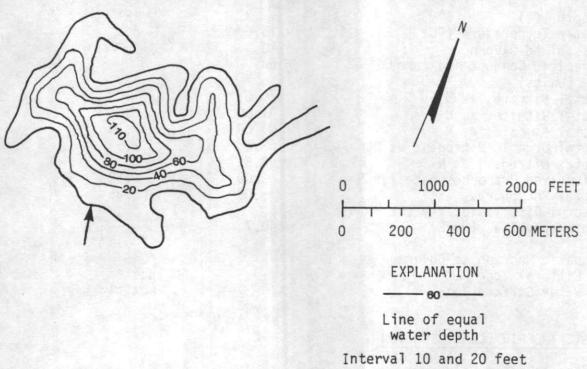
ST.	CLAIR LAKE	(SOUTH ARM)	THURSTON	COUNTY	WRIA	11

T17N-R01E-06 LATITUDE 460 59' 31" LONGITUDE 1220 43' 22"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	14.5		Residential Development	50	pct
Altitude Lake Area		ft acres	Number of Nearshore Homes	75	
Lake Volume	3,600	acre-ft	Land Handa Dundanan Banda		
Mean Depth Maximum Depth	110	ft ft	Land Use in Drainage Basin		
Shoreline Length	2.9	mi	Residential-Urban	0	pct
Shoreline Configuration	1 2.2		Residential-Suburban	<1	pct
Development of Volume	0.37		Agricultural	29	pct
Bottom Slope	4.8	pct	Forest or Unproductive	70	pct
Surface Inflow	Yes		Lake Surface	1	pct
Surface Outflow	Yes				•
			Public Boat Access to Lake	,	res 💮

Date	June	9, 1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 16.2 13.4 97 8.8 0.00 .00 .09 1.9 2.0 .07 .08	95 4.9 0.2 143 6.9 .01 .00 2.0 1.3 3.3 .78 1.6
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		30 pct <5 pct
LAKE TROPHIC CLASSIFICATION		
Characteristic Value		476
Trophic State Index (Carlson, 1977) TSISD TSITP TSICHI		59 67 70

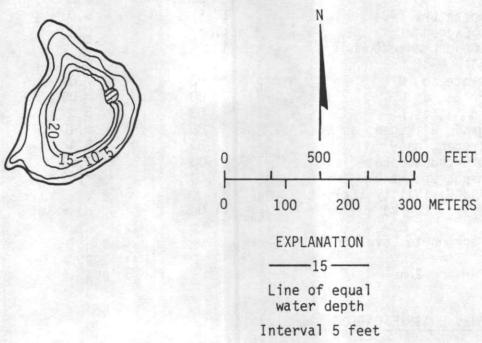




St. Clair (south arm) Lake, Thurston County. Photo taken June 9, 1981, view northeasterly. Bathymetric map from Washington Department of Game, February 12, 1951.

TEMPO (BUSHMAN) LAKE	TU	URSTON COUNTY	WRIA	13	
	LATITUDE				26"
T17N-R01W-28	LATITUDE	400 55 45	LONGITUDE 1220	40	20
PHYSICAL DATA		CULTURAL D	DATA		
Drainage area Altitude	0.96 mi ² 255 ft	Residentia	al Development	70	pct
Lake Area	32 acres 400 acre-ft	Number of	Nearshore Homes	24	
Mean Depth Maximum Depth	13 ft 24 ft	Land Use	in Drainage Basin		
Shoreline Length Shoreline Configuration	1.0 mi		tial-Urban tial-Suburban	0	pct pct
Development of Volume	0.52	Agricul	tural	5	pct
Surface Inflow	1.8 pct No	Lake Su	or Unproductive rface	5	pct pct
Surface Outflow	Yes	Public Boo	at Access to Lake		No
WATER-QUALITY DATA (in m	milligrams per	·liter unless	otherwise indica	ted)	
Date		June	9, 1981		
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (un pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, Total Nitrogen, as N Dissolved Orthophosphate Total Phosphorus, as P Secchi-Disc Visibility Chlorophyll a (ug/L) Aquatic Macrophyte Cover Littoral Zone Water-Surface Zone	nho) as N e, as P (ft)	3 16.6 8.3 6.7 0.01 .00 .09 2.4 2.5 .00 .09	21 8.0 0.2 80 6.3 .09 .01 .53 2.6 3.2 .12 .25 3		
LAKE TROPHIC CLASSIFICA	TION				
Characteristic Value			496		
Trophic State Index (Car TSI _{SD} TSI _{TP} TSI _{Chl}	rlson, 1977)		61 69 67		





Tempo (Bushman) Lake, Thurston County. Photo taken June 9, 1981, view northerly. Bathymetric map from U.S. Geological Survey, January 3, 1974.

TOATLC CUD LAVE	THURCTON COUNTY	LINTS 11	ว
TRAILS END LAKE	THURSTON COUNTY	WRIA 13	J

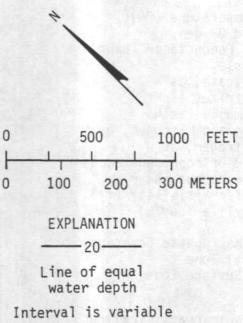
T17N-R02W-12 LATITUDE 460 58' 44" LONGITUDE 1220 52' 46"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	0.36		Residential Development	25	pct
Altitude	134	ft			
Lake Area	12	acres	Number of Nearshore Homes	6	
Lake Volume	194	acre-ft			
Mean Depth	16	ft	Land Use in Drainage Basin		
Maximum Depth	40	ft	_		
Shoreline Length	0.50	mi	Residential-Urban	0	pct
Shoreline Configuration	1.0		Residential-Suburban	25	pct
Development of Volume	0.41		Agricultural	49	pct
Bottom Slope	4.9	pct	Forest or Unproductive	21	pct
Surface Inflow	No	•	Lake Surface	5	pct
Surface Outflow	No		· · · · · · · · · · · · · · · · · · ·		•
			Public Boat Access to Lake		No

Date	June	10, 1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 17.5 11.1 41 6.9 0.02 .00 .03 .80 .85 .03 .04	32 5.0 0.2 90 6.3 .02 .00 3.0 .40 3.4 .54
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		95 pct 5 pct
LAKE TROPHIC CLASSIFICATION		
Characteristic Value		176
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		51 57 54



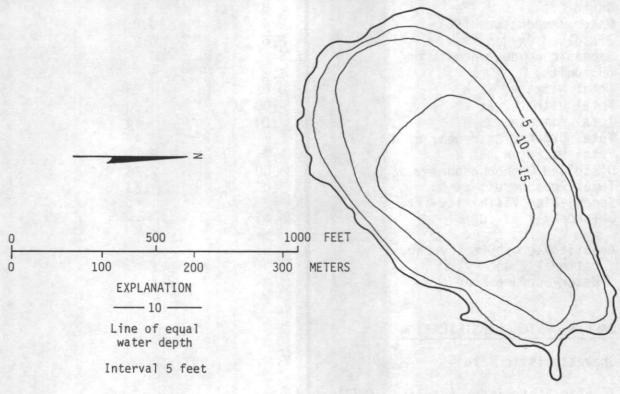




Trails End Lake, Thurston County. Photo taken June 10, 1981, view northeasterly. Bathymetric map from Washington Department of Game, May 31, 1950.

TROSPER LAKE	Th	IURSTON COUNTY		WRIA	13	
T18N-R02W-33	LATITUDE	460 59' 52"	LONGITUDE	1220	55'	43"
PHYSICAL DATA		CULTURAL D	<u>ATA</u>			
Drainage area Altitude	1.40 mi ² 150 ft	Residentia	l Developme	ent	40	pct
Lake Area	18 acres	Number of	Nearshore H	lomes	9	
Mean Depth	189 acre-ft 11 ft	Land Use i	n Drainage	Basin		
Maximum Depth Shoreline Length	15 ft 0.72 mi		ial-Urban		0	pct
Shoreline Configuration Development of Volume	1.2 0.70	Resident Agricult	ial-Suburba tural	ın	40 4	pct pct
Bottom Slope Surface Inflow	1.5 pct No	Forest of Lake Sur	r Unproduct	tive	54 2	
Surface Outflow	Yes			ماماد	_	No
		PUDITE BOO	it Access to	Lake		NO
WATER-QUALITY DATA (in m	milligrams per	liter unless	otherwise i	indica [.]	ted)	
Date		June 1	0, 1981			
Depth (ft) Water Temperature (°C) Dissolved Oxygen		3 16.5 9.7	17 11.0 0.2			
Specific Conductance (u	mho)	88 6.3	100 6.4			
pH (units) Total Nitrate, as N		0.04	.07			
Total Nitrite, as N Total Ammonia, as N		.00 .18	.00 .13			
Total Organic Nitrogen, Total Nitrogen, as N	as N	.22 .44	.52 .72			
Dissolved Orthophosphate Total Phosphorus, as P	e, as P	.02 .04	.03			
Secchi-Disc Visibility	(ft)		8			
Chlorophyll <u>a</u> (ug/L)		5,68				
Aquatic Macrophyte Cove Littoral Zone	rage		70 pct			
Water-Surface Zone			5 pct			
LAKE TROPHIC CLASSIFICA	TION					
Characteristic Value			93			
Trophic State Index (Ca	rlson, 1977)					
TSI _{SD}			47 57			
TSITP TSI _{Ch1}			48			





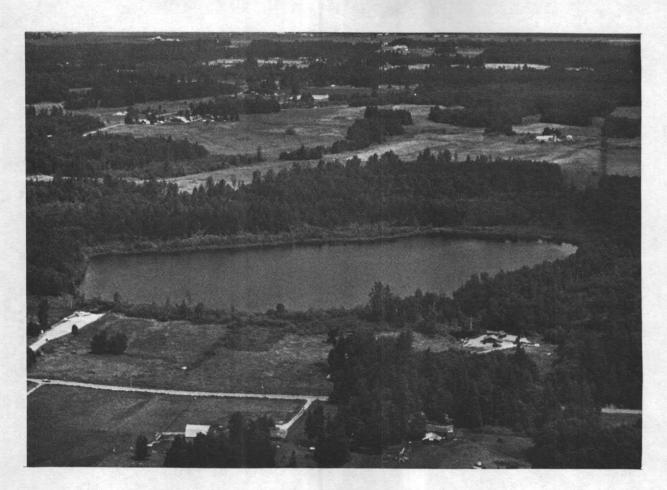
Trosper Lake, Thurston County. Photo taken June 10, 1981, view southwesterly. Bathymetric map from U.S. Geological Survey, May 27, 1981.

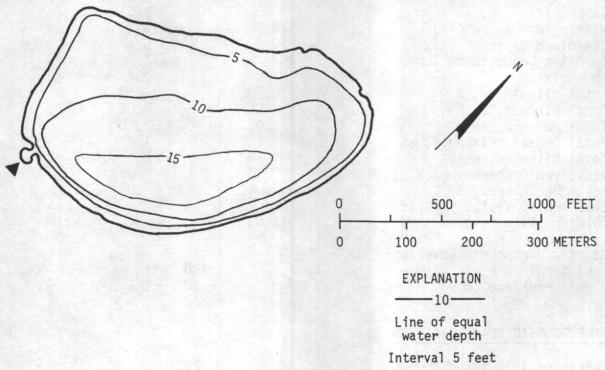
FAZON LAKE	WHATCOM COUNTY	WRIA O	1
· · · — • · · · — · · · · — ·	10,00,000,000,000	MINEN C	

T39N-R03E-13 LATITUDE 480 51' 52" LONGITUDE 1220 22' 04"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	0.97		Residential Development	0	pct
Altitude Lake Area	128 31	ft acres	Number of Nearshore Homes	0	
Lake Volume	300	acre-ft		•	
Mean Depth Maximum Depth		ft ft	Land Use in Drainage Basin		
Shoreline Length	0.89	mi	Residential-Urban	0	pct
Shoreline Configuration	1.1		Residential-Suburban	0	pct
Development of Volume	0.57		Agricultural	55	pct
Bottom Slope	1.3	pct	Forest or Unproductive	40	pct
Surface Inflow	Yes	•	Lake Surface	5	pct
Surface Outflow	No				•
			Public Boat Access to Lake	•	'es

Date	July	8,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 18.4 8.6 275 7.2 0.02 .00 .04 1.7 1.7 .00	3	16 10.8 0.2 400 6.7 .03 .00 .74 1.4 2.1 .26 .53
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		90 10	pct pct
Characteristic Value		397	
		Q 3.	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		61 69 63	



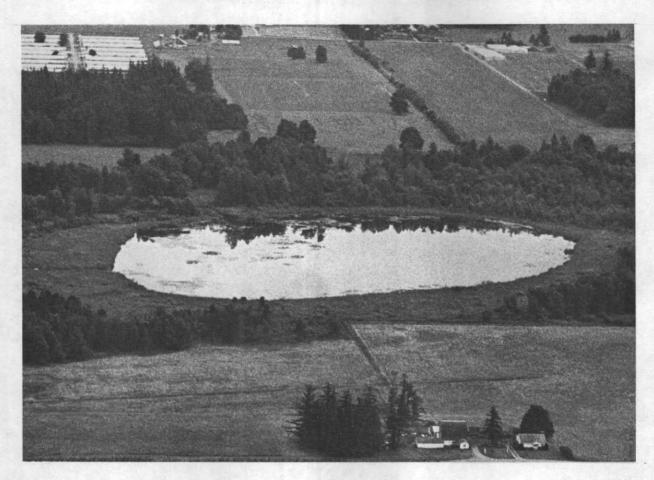


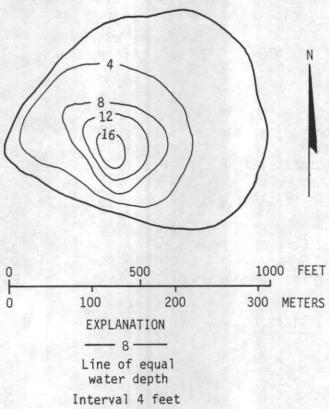
Fazon Lake, Whatcom County. Photo taken July 8, 1981, view northwesterly. Bathymetric map from U.S. Geological Survey, October 11, 1973.

FOUNTAIN LAKE		WHATCOM COUNTY	WRIA	01	
T39N-R03E-04	LATITUDE	480 54' 10"	LONGITUDE 1220	25 '	35"
PHYSICAL DATA		CULTURAL 1	DATA		
Drainage area	0.37 mi ²	Residenti	al Development	0	pct
Altitude Lake Area	68 ft 17 acres		Nearshore Homes	0	
Mean Depth	129 acre-ft 7 ft 14 ft		in Drainage Basin		
Maximum Depth Shoreline Length	0.61 mi		tial-Urban	Õ	pct
Shoreline Configuration Development of Volume	0.53	Residen Agricul	tial-Suburban tural	5 67	pct pct
Bottom Slope	1.4 pct	Forest	or Unproductive	22 6	pct
Surface Inflow Surface Outflow	No Yes	Lake Su	гтасе	O	pct
		Public Bo	at Access to Lake		No
WATER-QUALITY DATA (in)	milligrams pe	r liter unless	otherwise indica	ted)	
Date		July	8, 1981		
Depth (ft)		3	10		
Water Temperature (°C)		18.7 10.8	14.8 0.4		
Dissolved Oxygen Specific Conductance (u	nho)	207	215		
pH (units)	-	7.8	7.4		
Total Nitrate, as N Total Nitrite, as N		0.50 .01	.59 .06		
Total Ammonia, as N		.05	.15		
Total Organic Nitrogen.	as N	1.2	1.3		

Total Organic Nitrogen, as N Total Nitrogen, as N 1.2 1.7 2.1 Dissolved Orthophosphate, as P .00 .00 Total Phosphorus, as P .06 .06 Secchi-Disc Visibility (ft) Chlorophyll a (ug/L) 12.0 Aquatic Macrophyte Coverage Littoral Zone 100 pct 20 pct Water-Surface Zone LAKE TROPHIC CLASSIFICATION

Characteristic Value 258 Trophic State Index (Carlson, 1977) TSISD 57 TSITP 63 55 TSIChl





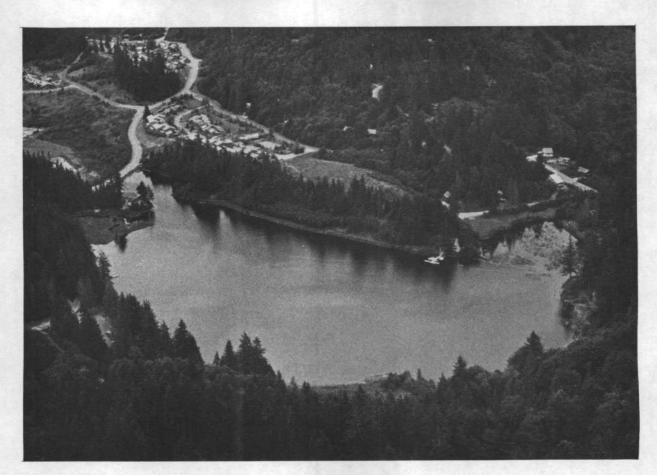
Fountain Lake, Whatcom County. Photo taken July 8, 1981, view southerly. Bathymetric map from U.S. Geological Survey, June 15, 1981.

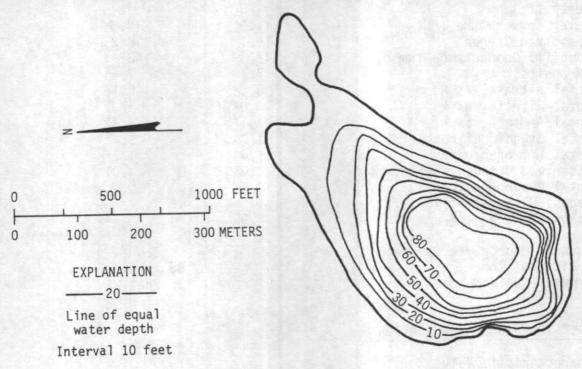
LOUISE LAKE	WHATCOM COUNTY	WRIA 01
	MINITOCH COON I	MINTU OI

T37N-R04E-08 LATITUDE 480 42' 26" LONGITUDE 1220 19' 39"

PHYSICAL DATA			CULTURAL DATA		
Drainage area	0.32	****	Residential Development	20	pc t
Altitude Lake Area	330 29	ft acres	Number of Nearshore Homes	9	
Lake Volume	1,000	acre-ft			
Mean Depth Maximum Depth		ft ft	Land Use in Drainage Basin		
Shoreline Length	1.0		Residential-Urban	0	pct
Shoreline Configuration			Residential-Suburban	2	pct
Development of Volume	0.38		Agricultural	0	pct
Bottom Slope	7.2	pct	Forest or Unproductive	84	pct
Surface Inflow	Yes	•	Lake Surface	14	pct
Surface Outflow	No				•
			Public Boat Access to Lake		No

Date	July	8,	1981
Depth (ft) Water Temperature (oC) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 19.4 10.2 75 6.9 0.20 .00 .03 .80 1.0 .00 .01	10	87 4.8 0.2 81 6.6 .65 .00 .11 .68 1.4 .00
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		70 < 5	pct pct
LAKE TROPHIC CLASSIFICATION			
Characteristic Value		108	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Chl}		44 37 44	





Louise Lake, Whatcom County. Photo taken July 8, 1981, view easterly. Bathymetric map from U.S. Geological Survey, October 9, 1973.

SILVER LAKE	V	WHATCOM COUNTY	١	WRIA	01	
T40N-R06E-07	LATITUDE	480 58' 02"	LONGITUDE	1220	04 '	11"
PHYSICAL DATA		CULTURAL D	ATA			
Drainage area Altitude	2.14 mi ² 757 ft	Residentia	1 Developmer	nt	25	pct
Lake Area Lake Volume	180 acres 3,100 acre-ft	Number of	Nearshore Ho	omes	31	
Mean Depth Maximum Depth	17 ft 30 ft	Land Use i	n Drainage E	Basin		
Shoreline Length	3.3 mi	Resident	ial-Urban		0	pct
Shoreline Configuration		Resident	ial-Suburban	1	3	pct
Development of Volume	0.55	Agricult	ural		7	pct
Bottom Slope	0.94 pct	Forest o	r Unproducti	ive	77	pc t
Surface Inflow	Yes	Lake Sur	face		13	pc t

 $\underline{\text{WATER-QUALITY DATA}} \text{ (in milligrams per liter unless otherwise indicated)}$

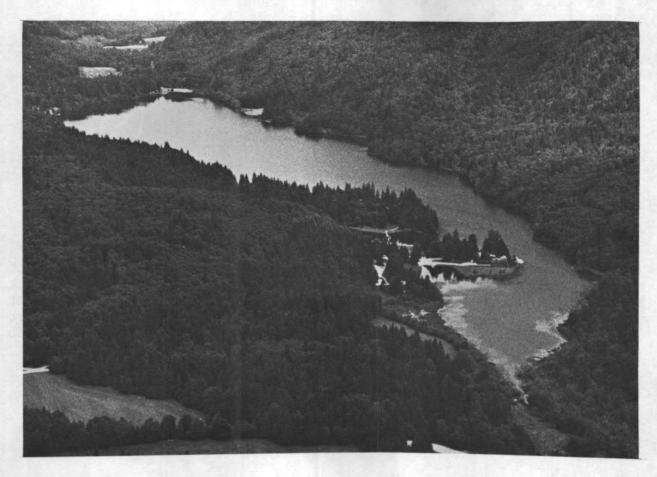
Public Boat Access to Lake

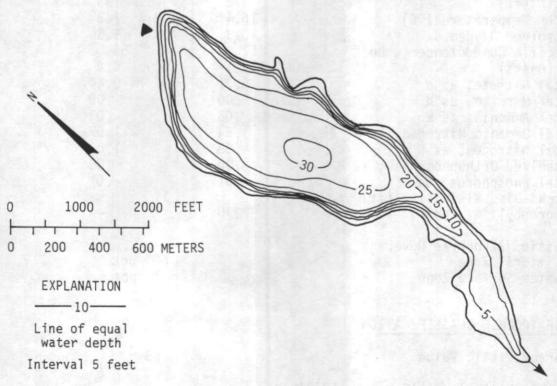
Yes

Yes

Surface Outflow

Date	July	8,	1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 16.9 10.1 148 7.7 0.08 .01 .11 1.7 1.9 .01	15	24 14.6 8.2 148 7.6 0.16 .01 .12 1.4 1.7 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone LAKE TROPHIC CLASSIFICATION		85 20	pct pct
LAKE TROPHIC CEASSIFICATION			
Characteristic Value		159	
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		38 61 30	





Silver (40N-6E-7) Lake, Whatcom County. Photo taken July 8, 1981, view northerly. Bathymetric map from Washington Department of Game, July 22, 1950.

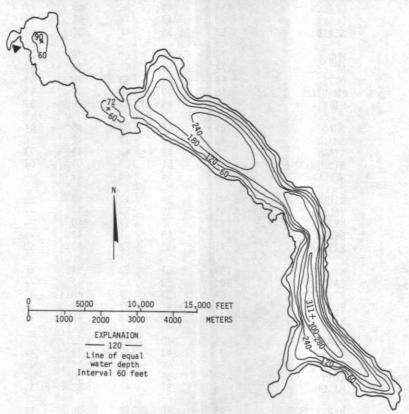
WHATCOM LAKE	WHATCOM COUNTY	WRIA	01
MINITED 11 21212	11		

T38N-R03E-28 LATITUDE 480 45' 28" LONGITUDE 1220 25' 17"

PHYSICAL DATA		CULTURAL DATA		
Drainage area	55.9 mi ²	Residential Development	55	pct
Altitude Lake Area	315 ft 5,000 acres	Number of Nearshore Homes	500	
Lake Volume Mean Depth	770,000 acre-ft 150 ft	Land Use in Drainage Basin		
Maximum Depth Shoreline Length	330 ft 27 mi	Residential-Urban	1	pct
Shoreline Configurat		Residential-Suburban	2	pct
Development of Volum		Agricultural	2 82	pct
Bottom Slope Surface Inflow	2.0 pct Yes	Forest or Unproductive Lake Surface	14	pct pct
Surface Outflow	Yes			•
		Public Boat Access to Lake		Yes

Date	July	8, 1981
Depth (ft) Water Temperature (°C) Dissolved Oxygen Specific Conductance (umho) pH (units) Total Nitrate, as N Total Nitrite, as N Total Ammonia, as N Total Organic Nitrogen, as N Total Nitrogen, as N Dissolved Orthophosphate, as P Total Phosphorus, as P Secchi-Disc Visibility (ft) Chlorophyll a (ug/L)	3 16.4 10.3 57 7.1 0.31 .00 .03 .54 .88 .00 .01	195 7.3 9.6 59 6.9 0.44 .00 .03 .57 1.0 .00 .01
Aquatic Macrophyte Coverage Littoral Zone Water-Surface Zone		60 pct 1 pct
LAKE TROPHIC CLASSIFICATION		
Characteristic Value		63
Trophic State Index (Carlson, 1977) TSI _{SD} TSI _{TP} TSI _{Ch1}		36 37 40





Whatcom Lake, Whatcom County. Photo taken July 26, 1974. Bathymetric map from Western Washington University, 1964.